

**XXV.—A Revision of the Dytiscid-genus
Lacconectus (Motsch.)** By A. ZIMMERMANN.

Through the kindness of Dr. E. Mjöberg, I have received for determination a small collection of *Dytiscids* belonging to the Sarawak Museum. The material comprises besides some common species, two specimens of the apparently very rare *Pleurodytes dinentoides* Sharpe and numerous specimens of *Lacconectus fulvescens* Motsch., previously recorded only from India and therefore new to Borneo.

This zoo-geographical statement has given me reason to revise the interesting genus and to give a key to all known species, adding also the description of a new form.

A.—Dorsal side nearly smooth or only very finely punctured
.....Group I.

B.—Dorsal side with deep, rounded punctures or distinctly transversely striated.....Group II.

GROUP I.

1. Elytra as well as the whole body, brownish red.
2. Size large, 4.3--5 mm.
3. The punctures of elytra, though fine, yet quite recognizable by use of larger magnification. Striæ of elytra strong; besides the two middle ones, the punctures of which are very densely placed, there are three more striæ, one near the suture, consisting of only very few punctures, a second one in the middle and a third one near the lateral margin.

L. BASALIS Sharp.

4. Elytra at the base with a blackish, in the middle slightly wider border, behind this an obsolete yellowish crossband consisting of two or three confluent maculae.

Broad—oval, slightly convex; ventral side reddish, epipleuræ blackish except near the base; dorsal side also reddish, head near the eyes, the eyes and the prothorax in the centre, slightly darker; elytra shining, slightly iridescent, yellowish-brown, the above mentioned subbasal band and a broader lateral band posteriorly lighter yellowish, the latter not quite reaching to the margin but interrupted by a narrow blackish band, which behind the middle takes the shape of a small macula and before the middle continues as a much broader band reaching the shoulders. Dorsal side with very fine, on the head and prothorax somewhat stronger reticulation; elytra finely and not deeply, but fairly densely punctured; the four basal joints of the fore and middle tarsi in ♂ fairly strongly dilated.

Length of body 5--5.5 mm.

Locality: Burma, Cochin China.

4a Elytra at the base slightly lighter coloured than on the disc, but the colouration vague, not forming a crossband; basal margin without darker band.

L. RITSEMAE Reg.

5. Body 4.6--5.2 mm.; lateral margin of elytra with narrow blackish band.

Oval, only slightly convex, moderately shining, the whole body yellowish-reddish, only the head near the eyes and the prothorax anteriorly and on the disc vaguely darker coloured; elytra light brownish, showing vague signs of a yellowish-red colouration near the base and on the disc; the reticulation with extremely fine punctures, more indistinct behind the middle, posteriorly disappearing almost entirely and showing only somewhat stronger punctures; striae distinct; the four basal joints of the fore and middle tarsi in ♂ only slightly dilated, only slightly broader than in ♀.

Locality: Java, Burma.

L. LIVIDUS Reg.

5a Body 4.5 mm.; lateral margin of elytra not darker coloured.

Slightly smaller than *L. ritsemæ* the colouration of elytra nearly uniform, the lateral margin not darkened, the disc hardly noticeably darker than the base; punctures, reticulation and striæ as in the preceding species. Perhaps only a variety of it!

Locality : Burma, Tenasserim.

L. FULVESCENS Motsch.

3a Dorsal side with indistinct punctures, nearly smooth, striæ fine, secondary ones very faint; no puncture near the suture.

Easily distinguished from the preceding species by the smaller, more narrowly oval body, by the much finer striæ and the extremely fine hardly noticeable punctures, which become more distinct towards the posterior half; the colouration in general is the same, but the head more extensively and strongly darkened; elytra more shining, brownish-yellow without any limited maculæ; the reticulation is very fine and regular all over.

Length of body 4--4.2 mm. (forma typica).

The specimens from Borneo are larger, (4.3 mm.) body more tapering towards the ends, the darker colouration of prothorax forms a discal macula, the elytra dark brown with the lighter coloured parts less outstanding; the lateral margin blackish; the reticulation is very much finer, hardly any longer noticeable and almost absent on the posterior parts of elytra.

Localities : North India, Tenasserim; Borneo : Sarawak, Mt. Poi (3000 feet), Mt. Penrissen (3500 feet), leg. Dr. E. Mjöberg, Mt. Matang.

L. OCEANICUS Reg.

2a Size smaller, 3.5--3.7 mm.

The smallest species of the genus, very similar to *L. fulvescens* but easily distinguished by the smaller size, by the posteriorly more elongate and more strongly tapering shape, by the still finer, posteriorly entirely obsolete striæ of elytra and by some differences in colouration; the darker shadows on the disc of prothorax much more extensive; elytra at the suture and at the base narrowly, at the lateral margin comparatively broadly darkened; the subbasal lighter cross-band stands out fairly distinctly against the uniformly light-brown background; the reticulation especially in ♂, very fine, the details no longer definable; punctures entirely absent.

Localities: Mentawi Islands and Balabac.

GROUP II.

1. Dorsal side to the greatest extent yellowish-red or brownish-red.

L. STRIGULIFER n. sp.

2. Elytra with two faint striæ and numerous short rows of punctures.

In my work, "Neue Schwimmkafer" (Ent. Blatter., xix, 1923, p. 36) I refer to a *Lacconnectus* species from India, which in spite of its striking and aberrant sculpture was not described as a new species chiefly owing to fact that I had access only to a single female specimen. I did not feel quite sure that we did not have to do with a dimorphic sexual sculpture. Later on, however, I received also a single male specimen from the same locality, which makes sure that it represents a species of its own.

Broadly oval, in shape and size nearest to *L. lividus*; brownish-yellow, moderately shining; posterior coxæ slightly darker; head near the eyes darkened; on the prothorax broader shadows in the middle and on elytra a fine sutural line and a triangular-shaped marking, in the middle of the base brownish;

the subbasal crossband as in *L. basalis*, but does not extend so far towards the margin and does not reach the shoulder; reticulation distinct everywhere; macro sculpture consisting of numerous fine and very short streaks, which in the middle of prothorax are less numerous and which take the shape of irregular punctures near the ends of elytra, but which otherwise are regularly distributed; the four basal joints of the fore and middle tarsi in ♂ fairly strongly dilated.

Locality: India.

L. PUNCTIPENNIS n. sp.

2a Elytra with two strong discal striæ and scattered and strong punctures.

In size, shape, and colouration nearest to *L. basalis*, but not quite so broadly oval; above and underneath yellowish-red, head near the eyes blackish; across the disc of prothorax a darker shadow; elytra slightly darker, brownish-red, a narrow basal band and at the lateral margin a fairly broad band, not reaching quite to the end, blackish; a band near the suture and a subbasal indistinct crossband, externally limited by the dark shoulders, yellowish-red; head and prothorax with distinct reticulation and small microscopic punctures; elytra on account of the almost entirely absent reticulation more shining, with double punctures consisting of extremely fine and very densely and regularly arranged points and much stronger irregularly arranged ones; the discal striæ strong.

Locality: Banjoewango (Java). leg. MacGillivray; one specimen in my collection.

1a Dorsal side to the greatest extent black.

L. BICOLOR Zimm.*.

3 Ventral side red.

A species easily recognized by its size and colouration; oval, slightly convex, underneath red, above dull black, shining; head with exception of a brownish shadow near the eyes and a broader irregular lateral border on prothorax, red; sometimes the latter is completely uniformly red; elytra with two subbasal

* Ent. Blatter. xix, 1923, p. 36.

maculae which sometimes form a crossband; there is also a sublateral macula in the middle and a diffuse broad crossband before the end; as a rule the colouration is faint and indistinct; reticulation extremely fine, very regular and finely punctured; the striae of elytra moderately strong, also the two medium rows normal, the one near the suture marked by some points in the posterior third.

Length of body 6.5-7 mm.

Locality: South India.

L. SIMONI Reg.*.

3a. Ventral side brownish black.

Abdomen reddish, prosternum, the base of epipleurae, legs, antennae and palpi reddish-yellow; above black, head anteriorly and a big macula red; prothorax with a broader lateral margin dilated behind the eyes; elytra as a rule with a red marking, consisting of two subbasal, a sublateral one in the middle and one before the end, which latter is combined with the lateral one; of the two basal maculae the interior small, rounded, often missing, the external one much bigger, transverse, reticulation very fine, especially on elytra, which, as also the prothorax (less in the ♀) is covered by strong, very short, deeply impressed streaks, among which the two discal striae stand out only faintly.

Locality: Ceylon.

* Another species, *Lacconnectus festae* Griff. from Ecuador is unknown to me. The species in colouration is similar to *L. basalis* but seems to be distinguished by its size (6.5 mm.) and the lack of striae of elytra. The occurrence of a species of this genus otherwise confined to the Indo-Malayan region, is certainly strange. A closer examination, however, will perhaps show that *L. festae* has to be entered within the very closely related American genus *Aglymbus* Sch.